



CLAIM AMENDMENTS

Please amend the claims by amending claims 1, 7-8 and 10-14; please cancel claim 9; and please add new claims 15-19, all as set forth in the following rewritten claims.

Claim 1 (Currently amended). A machine for bunching plant stems, which machine is provided with a supply mechanism having a pair of rollers, which rollers are arranged rotatably about mutually parallel, counter-rotating rotary shafts, so that surfaces of revolution of the rollers at least substantially touch each other, and a receiving mechanism with a flexible band for receiving plant stems which upon rotation of the rollers are carried along between the rollers, characterized in that the receiving mechanism includes a gripper movable relative to the rollers, the gripper having a pair of mechanical fingers capable of gripping together between open and closed positions, while at least a part of the flexible band is being tensioned between the fingers, the band receiving plant stems from the rollers when the fingers are in an open position, the band being expanded into a loop of increasing size that resiliently engages the stems as stems are collected in the band, the mechanical fingers closing the loop so as to cause the band to substantially encircle the stems and resiliently hold the stems in a bunch when the fingers are closed.

Claim 2 (Original). A machine according to claim 1, wherein ends of the band are secured on the gripper, so that the rotary shafts of the rollers are situated outside a space that is embraced by fingers and the part of the band that is tensioned between the fingers.

Claim 3 (Previously presented). A machine according to claim 1, provided with a pair of lips resiliently pressing substantially against each other at a location on the discharge side of a plane through the rotary shafts of the rollers, placed such that stems that have been supplied

by the rollers, after having been pressed between the lips by the rollers, are pushed away from the rollers by the lips.

Claim 4 (Previously presented). A machine according to claim 1, wherein the gripper is provided with an upholder with a point of connection that is connected to a part of the band between the fingers, the upholder being so arranged as to allow a movement of the point of connection in a direction from an opening between the fingers, the movement being limited to movement in a plane through both fingers.

Claim 5 (Previously presented). A machine according to claim 1, wherein the gripper includes a further pair of fingers between which a further flexible band is tensioned, parallel to the fingers mentioned earlier, with a space between the pair of fingers and the further pair of fingers for receiving the rollers.

Claim 6 (Previously presented). A machine according to claim 1, with a movement mechanism for moving the gripper and the rollers relative to each other between a receiving position and a tying position, in which receiving position the part of the band that is tensioned between the fingers is arranged on a discharge side of the plane through the rotary shafts of the rollers, so that stems carried along by the rollers are received with the band between the fingers, and in which tying position the fingers enclose the received stems with the band, while the stems, compared with the receiving position, are arranged further away from the rollers.

Claim 7 (Currently amended). A machine according to claim 1, wherein the gripper fingers are opened and closed by an opening and closing ~~is provided with a gripping mechanism for bringing the ends of the fingers together.~~

Claim 8 (Currently amended). A machine according to claim 7, ~~provided with~~ wherein the opening and closing mechanism includes a stop which is coupled to a frame in which the rollers are mounted, and wherein at least one of the fingers is mounted rotatably on an arm, and wherein on this finger an engagement element is mounted for pushing the gripper fingers open with the stop when the gripper is moved towards the rollers.

Claim 9 (Canceled).

Claim 10 (Currently amended). A gripper according to claim 915, provided with a further pair of fingers capable of mutually gripping together, wherein at least a part of a further flexible band is tensioned between the fingers, wherein the pair of fingers and the further pair of fingers are included parallel to each other, with a space therebetween for receiving a pair of rollers in a non-gripping manner.

Claim 11 (Currently amended). A gripper according to claim 915, provided with a pair of meshing gearwheels which are coupled to the fingers to transmit an opening push force from one finger to the other, and at least one spring element which is coupled to at least one of the fingers to move ends of the fingers towards each other when from outside the gripper no opening push force is exerted.

Claim 12 (Currently amended). A gripper according to claim 913, provided with an upholder having a point of connection which is connected to a part of the band between the fingers, the upholder being so arranged as to allow a movement of the point of connection in a direction from an opening between the fingers, the movement being limited to movement in a plane through both fingers.

Claim 13 (Currently amended). A method for bunching plant stems, wherein the plant stems are carried along between a pair of rollers, and after being carried along by the rollers

are received in a flexible band, characterized in that the flexible band is tensioned between fingers, capable of gripping together, of a mechanical gripper, which fingers, at reception, keep the band with an opening between the fingers on a discharge side of a plane through rotary shafts of the rollers, whereafter ends of the fingers are brought towards each other and the stems in the gripper are moved away from the rollers to be tied together.

Claim 14 (Currently amended). A method according to claim 13, wherein the stems ~~at reception~~ are pushed with lips away from the rollers ~~to~~toward the band after they have been carried along by the rollers into the receiving apparatus.

Claim 15 (New). In a machine for bunching plant stems wherein plant stems are transported by a supply mechanism to a receiving mechanism that collects the plant stems into bunches, the improvement wherein the receiving mechanism includes a mechanical gripper that receives and bunches the plant stems, the gripper including a pair of mechanical fingers movably mounted in the machine so as to be capable of mutually gripping together when the fingers are moved to a closed position, the fingers also having an open position wherein the fingers are separated, at least a part of a flexible band being tensioned between the fingers for resiliently receiving and engaging stems that are received between the fingers when the fingers are in an open position, the fingers causing the flexible band to encircle the stems and hold them in a bunch when the fingers are moved to a closed position, the fingers being moved between an open and closed position by an opening and closing mechanism.

Claim 16 (New). In a machine for bunching plant stems, wherein plant stems are conveyed to a receiving mechanism where the plant stems are gathered together in a bunch, the improvement wherein the receiving mechanism comprises a gripper having a pair of mechanical

fingers capable of mutually gripping together, a flexible band extending under tension between the fingers, the gripper receiving plant stems from the supply mechanism through the fingers and against the flexible band when the fingers are in an open position, the fingers being closeable by a closing mechanism to bunch the plant stems together within the flexible band.

Claim 17 (New). A machine according to claim 1 wherein at least one of two ends of the flexible band is attached to a spring that maintains the band in tension, the fingers engaging and guiding the band at positions between the ends on opposite sides of a central loop portion, wherein stems are collected into bunches.

Claim 18 (New). A method for bunching plant stems comprising:
transporting the plant stems sequentially to a receiving position by means of a pair of closely spaced counter-rotating rollers; receiving the plant stems from the rollers and collecting them in bunches by means of a receiving apparatus that includes a flexible band maintained under tension and extending between a pair of mechanical fingers that are movable between open and closed positions, the plant stems being transported through the fingers into engagement with the band when the fingers are opened, the band forming a resiliently enlarging loop around the stems as they are received between the fingers, the fingers being closeable to close the resilient loop around the stems when a bunch of stems is completed.

Claim 19 (New). A method as in claim 18 wherein the receiving apparatus is movably mounted for movement toward and from the rollers, the receiving apparatus being

moved away from the rollers for manually binding the plants in a bunch after the stems have been collected in a bunch with the receiving mechanism positioned toward the rollers.